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11:00 a.m. – 12:30 p.m.

Risk Factors for Drug-Related Problems Causing Emergency Department Visits in Older Adults
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In older adults polypharmacy and the use of inappropriate medications are a common cause of drug-related emergency department visits. Given the complex interplay between social, economic and medical factors in older adults the present study explored a comprehensive list of potential risk factors for drug-related emergency department visits. Potential factors included gender; age; comorbidities; history of falls; cognition; education; dependence for activities of daily living; social supports; frailty, number of medications; medication appropriateness index; and use of specific high risk medications. Information collected from the Comprehensive Geriatric Assessment during patient assessment in the emergency department from a subset of the geriatric internal medicine service between 2006 and 2013 was used. Backward stepwise binary logistic regression was used to examine the multiple potential risk factors for drug-related emergency department visits in older adults. The analysis showed that narcotic drug use, any anticholinergic drug use, lack of social supports and increased use of inappropriate medications as identified by an increased medication appropriateness index increased the risk of drug-related emergency department visits. This investigation suggests that avoiding inappropriate medications, avoiding high risk medications such as narcotics and anticholinergic drugs, and the presence of adequate social supports are important in preventing drug-related emergency department visits in older adults.

Using Health Services Administrative Data to Determine Adherence to the STOPP Criteria: Examples from Nova Scotia

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Objectives: Evidence-informed explicit screening tools have been developed to help healthcare professionals systematically review medication profiles. We used individual criterion from STOPP, a screening tool developed and validated for reviewing older persons' medications, to evaluate the appropriateness of prescribing in Nova Scotia. Methods: Nova Scotia Seniors' Pharmacare drug dispensation database was used in conjunction with the MSI Physician's Billings and the Canadian Institute for Health Information's Discharge abstract database to estimate concordance between prescribing practice and criteria for benzodiazepines and zopiclone (BZD-Z), proton pump inhibitors (PPIs) and colchicine. Descriptive statistics, trend tests, and multivariate logistic regression were used to demonstrate significance. Results: Potentially inappropriate prescribing such as the use of long-acting benzodiazepines (i.e. diazepam 1.5%), duplicate therapy (1.6%), and ≥ 30 days (22.6%) dispensed treatment were prevalent. Older adults received a BZD-Z in the 100 days following discharge in 74% of patients receiving a BZD-Z in the 100 days prior to a fall-related hospitalization. Prescribing of PPIs was

potentially inappropriate (dosage or length of regimen) in 37% of new recipients of the drug. Colchicine was considered potentially inappropriate when prescribed ≥ 3 months duration, which occurred in 14.2% of the study population. Conclusions: Nova Scotia administrative health data may be used to identify areas for quality improvement initiatives. Limited concordance between prescribing practice and STOPP indicate opportunities for improvement in prescribing in older adults in Nova Scotia.

Frailty Recognition and Management in Emergency and Acute Care: A Review of Evidence and Policy

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Introduction: Early identification of frailty is vital for providing older adults with personalized care. Yet, there is no agreement on which instrument should be used, especially in clinical settings. To help address this challenge, we are conducting a scoping review focused on frailty identification and management in pre- and in-hospital settings. Methods: Literature databases (MEDLINE, CINAHL, Embase, PsycINFO, Eric and Cochrane) were systematically searched. The search terms were “frail” and synonyms of “acute care” and “pre-hospital”. Studies were excluded if published before 2000 or if older adults were not included. The search was not limited based on language, design, quality or outcome measure. A grey literature search of websites, government reports, and clinical guidelines will be conducted. Using DistillerSR software, two reviewers independently screened titles and abstracts. Full text of articles meeting reviewers’ agreement will be further screened. For each relevant article, extracted data will include: descriptive data (subject demographics, study design etc), frailty measurement tools, and feasibility estimates and outcome measures. Results: The database search yielded 6111 articles. After screening titles and abstracts, 2773 articles remained, 2539 were excluded and for 798 articles there was disagreement among the reviewers. Currently, a third reviewer is resolving these disagreements and screening of the full text of the articles is underway. Conclusion: Identifying frailty early could lead to more targeted care and could help end unnecessary assessments of the severely frail. Proper management can improve health outcomes and help with care planning.